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EXAMINER				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/686,572

Applicant(s)

DUBIL ET AL.

Examiner

MYLINH TRAN

Art Unit

2179

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Appeal brief filed 03/13/09, 11/20/09.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4, 6, 14, 16-18, 20-22, 24-26 and 29-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4, 6, 14, 16-18, 20-22, 24-26 and 29-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This communication is responsive to the Appeal Brief, filed 03/13/2009. Claims 4, 6, 14, 16-18, 20-22, 24-26 and 29-33 are pending in this communication, and this office action is made non-final.

Reopening of Prosecution After Appeal Brief or Reply Brief

In view of the Appeal Brief filed on 10/19/06, PROSECUTION IS HEREBY REOPENED. The new ground(s) of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below.

Claim Objections

The claims (below) are objected to because of the following informalities:
The term "EPG", "ECG" in claim 4 should be spelled out.

The term "CE" in claims 16, 18, 25, 30 should be spelled out.

The terms "IR", "RF" in claims 6, 14, 16, 18, 31, 33 should be spelled out.

The term "XML" in claims 16, 17, 18, 31 should be spelled out.

Claim 14, line 12, there is a typo error in the phrase "in which they keys and icons". Appropriate correction is required.

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o); wherein it requires that the terms and phrase used in the claim(s) must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description. Correction of the following is required: "a machine readable memory" as recited in claim 16.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 recites "the control device" on line 18. There are insufficient antecedent basis for the limitation.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 17 is rejected under 35 U.S.C. 102(e) as being anticipated by Zintel et al. [US. 7,130,895].

As to claim 17, Zintel et al. teach enabling each of a plurality of users to specify to a server, over the bidirectional data network, a user specified apparatus for being controlled by a universal control device of a user (column 6, line 63 through column 7, line 20); enabling the server to identify XML tags that specify control codes included in data in XML language format (column 51, line 65 through column 52, line 10), the control code being representative of control codes for controlling the user specified apparatus and sending instructions for the specified apparatus (column 11, line 11 through column 12, line 25); enabling the server to communicate with a home network that comprises the user's control device for delivery of the control codes to the control device (column 7, line 61 through column 8, line 13), wherein the control codes are not directly usable by the specified apparatus until conversion of the control codes by the home network into commands that

can be sent by the control device to the specified apparatus independent of the bidirectional network (column 16, line 40 through column 17, line 15);

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shen et al. [US. 6,401,059].

As to claim 33, Shen teaches a touch screen display (column 2, lines 20-37); an IR or RF transmitter (column 3, lines 1-16); a memory; an interface; a processor programmed to: receive an input indicative of a consumer appliance to be controlled, control the interface to go via the internet to a webist (column 2, lines 33-52) and retrieve (1) IR or RF control codes for the consumer appliance to be controlled (column 3, lines 1-16) and (2) a description of a key pad layout corresponding to the standard remote control for the consumer appliance to be controlled (figure 3); store the retrieved IR or RF control codes and the key pad layout (figure 3) description in the memory (column 2, lines 40-52); control the touch screen to display icons depicting the key pad layout corresponding to the standard remote control for the consumer appliance to be controlled (column 2, line 52 through column 3, line 15) , and in response to one of the icons displayed on the control screen being touched (column 2, line 52 through column 3, line 15), controlling the IR or RF transmitter to transmit a control code represented by the touched icons (column 4, lines 20-38), wherein by the universal remote control emulates the standard remote controls for one or more controlled consumer appliances (column 4, lines 20-38).

While Shen et al. teach the universal remote user interface being as front panel display for controlling the specified apparatus and a PDA screen including icons and soft keys (figure 3, column 3, lines 8-12, lines 60-65; column 1, lines 18-40), Shen et al. do not explicitly show the touch screen

GUI of the universal remote. However, the touch screen GUI of the universal remote was a well known feature as demonstrated by Shen et al. because Shen teaches a method and system for using a personal digital assistant (PDA) as a remote control. PDA is defined by Wikipedia (Wikipedia.org) as **A personal digital assistant (PDA)**, also known as a **palmtop computer**, is a mobile device which functions as a Personal information manager and connects to the internet. The PDA has an electronic visual display enabling it to include a web browser, but some newer models also have audio capabilities, enabling them to be used as mobile phones or portable media players. Many PDAs can access the internet, intranets or extranets via Wi-Fi, or Wireless Wide Area Networks (WWANs). Many PDAs employ touch screen technology (wherein Shen et al. teach downloading control code in XML language format into the remote control (PDA) (column 2, line 52 through column 3, line 15)).

Accordingly, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the front panel display of Zintel et al. to include the well-known feature of the touch screen GUI including icons and soft keys to achieve the claimed invention. One would be motivated to make such a combination is to provide the user an easy to use as the user simply touches what he/she sees on the display.

Claims 4, 6, 14, 16, 18, 20-22, 24-26 and 29-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zintel et al. [US. 7,130,895] in view of Shen et al. [US. 6,401,059].

As to claim 6, Zintel et al. teach enable a user to specify to a server on the internet at least one apparatus to be controlled by the universal remote (column 6, lines 1-29), the server on the internet including a database of code sets (column 8, lines 25-65), each apparatus having a corresponding dedicated remote with a control panel (column 7, line 62 through column 8, line 59);

enabling the server on the internet to identify a control code corresponding to each specified apparatus and to provide the control code as data in a mark-up language format (figures 28-29, column 6, line 64 through column 7, line 9);

providing each identified control code over the internet to a home network, the mark-up language format control code (column 18, line 65 through column 19, line 5) including a code set representative of commands to control a state of the specified apparatus (column 18, line 49 through column 50, line 5);

While Zintel et al. teach the universal remote user interface being as front panel display for controlling the specified apparatus, Zintel et al. do not explicitly show a graphical representation of the icons on the touch screen GUI of the universal remote such that the touch screen GUI depicts the

control panel of the dedicated remote including icons and soft keys.

However, Shen et al. teach the universal remote user interface being as front panel display for controlling the specified apparatus and a PDA screen including icons and soft keys (figure 3, column 3, lines 8-12, lines 60-65; column 1, lines 18-40), Shen et al. do not explicitly show the touch screen GUI of the universal remote. However, the touch screen GUI of the universal remote was a well known feature as demonstrated by Shen et al. because Shen teaches a method and system for using a personal digital assistant (PDA) as a remote control (wherein Shen et al. teach downloading control code in XML language format into the remote control (PDA) (column 2, line 52 through column 3, line 15)).

Accordingly, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the front panel display of Zintel et al. to include the well-known feature of the touch screen GUI including icons and soft keys to achieve the claimed invention. One would be motivated to make such a combination is to provide the user an easy to use as the user simply touches what he/she sees on the display.

While Zintel et al. teach downloading the control code in XML language into the remote control to control the specified apparatus (column 51, lines 55-62, "The device functions 922 is a software code module to implement the device's functionality. For example, where the embedded computing device

is a VCR, the device functions code can include code to implement start, stop, pause, record and other functions that the VCR can perform"); and the IR/RF transmission (column 54, lines 45-63, "a digital camera 1020, a handheld PC (H/PC) 1021, and other personal computing device 1022 connect via an infrared port (IRDA) 1024, which also attached to the PC 1004 through the USB 1017, Zintel et al. do not clearly teach the features of the touch screen GUI to display a graphical representation of the control panel of the dedicated remote of the specified apparatus including icons and soft keys;

the control code not being usable by the specified apparatus until the control code is converted into the command and transmitted to the apparatus by an IR or RF transmission independent of the internet, wherein the apparatus is not pre-configured to deliver or cause delivery of its respective control code to a control device; enable the universal remote to convert the control code into the associated commands to control the specified apparatus; using the soft keys of the displayed control panel on the touch screen GUI to enable the universal remote to send commands to the specified apparatus via the IR or RF transmission.

However, Shen et al. show the control code being converted into the command and transmitted to the apparatus by an IR transmission independent of the internet (column 3, lines 22-26, "This selection will cause the emulator 216 to send instructions to the television 222 to display the

selected TV program. The instructions are sent via an infrared signal outputted through the infrared port 218 of the PDA 210 to the infrared port 224 of the television 222); the touch screen GUI to display a graphical representation of the control panel of the dedicated remote of the specified apparatus (figure 3) including icons and soft keys (column 2, line 40 through column 3, line 16)

Accordingly, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the IR port of Zintel et al. to include the transmission from the remote control (PDA) to the apparatus by the IR signal to achieve the claimed invention. One would be motivated to make such a combination is to provide an energy efficient method of communication between two devices.

As to claim 4, Shen et al. teach the control code comprising part of an EPG (figure 3). Accordingly, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the IR port of Zintel et al. to include the transmission from the remote control (PDA) to the apparatus by the IR signal to achieve the claimed invention. One would be motivated to make such a combination is to provide an energy efficient method of communication between two devices.

As to claim 14, Zintel et al. teach enable a user to specify to a server on the internet at least one apparatus to be controlled by the universal remote (column 6, lines 1-29), the server on the internet including a database of

code sets (column 8, lines 25-65), each apparatus having a corresponding dedicated remote with a control panel (column 7, line 62 through column 8, line 59); enabling the server on the internet to identify a control code corresponding to each specified apparatus and to provide the control code as data in a mark-up language format (figures 28-29, column 6, line 64 through column 7, line 9); providing each identified control code over the internet to a home network, the mark-up language format control code (column 18, line 65 through column 19, line 5) including a code set representative of commands to control a state of the specified apparatus (column 18, line 49 through column 50, line 5);

While Zintel et al. teach the universal remote user interface being as front panel display for controlling the specified apparatus, Zintel et al. do not explicitly show a graphical representation of the icons on the touch screen GUI of the universal remote such that the touch screen GUI depicts the control panel of the dedicated remote including icons and soft keys.

However, while Shen et al. teach the universal remote user interface being as front panel display for controlling the specified apparatus and a PDA screen including icons and soft keys (figure 3, column 3, lines 8-12, lines 60-65; column 1, lines 18-40), Shen et al. do not explicitly show the touch screen GUI of the universal remote. However, the touch screen GUI of the universal remote was a well known feature as demonstrated by Shen et al. because Shen teaches a method and system for using a personal digital

assistant (PDA) as a remote control. PDA is defined by Wikipedia (Wikipedia.org) as A **personal digital assistant (PDA)**, also known as a **palmtop computer**, is a mobile device which functions as a Personal information manager and connects to the internet. The PDA has an electronic visual display enabling it to include a web browser, but some newer models also have audio capabilities, enabling them to be used as mobile phones or portable media players. Many PDAs can access the internet, intranets or extranets via Wi-Fi, or Wireless Wide Area Networks (WWANs). Many PDAs employ touch screen technology (wherein Shen et al. teach downloading control code in XML language format into the remote control (PDA) (column 2, line 52 through column 3, line 15)).

Accordingly, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the front panel display of Zintel et al. to include the well-known feature of the touch screen GUI including icons and soft keys to achieve the claimed invention. One would be motivated to make such a combination is to provide the user an easy to use as the user simply touches what he/she sees on the display.

While Zintel et al. teach downloading the control code in XML language into the remote control to control the specified apparatus (column 51, lines 55-62, "The device functions 922 is a software code module to implement the device's functionality. For example, where the embedded computing device is a VCR, the device functions code can include code to implement start,

stop, pause, record and other functions that the VCR can perform"); and the IR/RF transmission (column 54, lines 45-63, "a digital camera 1020, a handheld PC (H/PC) 1021, and other personal computing device 1022 connect via an infrared port (IRDA) 1024, which also attached to the PC 1004 through the USB 1017, Zintel et al. do not clearly teach the features of the touch screen GUI to display a graphical representation of the control panel of the dedicated remote of the specified apparatus including icons and soft keys in which keys and icons for selecting the commands for the selected apparatus are in the same locations as the corresponding keys and icons of the dedicated remote such that when a user switches between the remote control device and the dedicated remote, the control keys are in the same position as the corresponding keys and icons of the dedicated remote such that when a user switches between the remote control device and the dedicated remote, the control keys are in the same position and have the same function as the dedicated remote;

the control code not being usable by the specified apparatus until the control code is converted into the command and transmitted to the apparatus by an IR or RF transmission independent of the internet, wherein the apparatus is not pre-configured to deliver or cause delivery of its respective control code to a control device; enable the universal remote to convert the control code into the associated commands to control the specified apparatus; using the soft keys of the displayed control panel on the touch screen GUI to enable

the universal remote to send commands to the specified apparatus via the IR or RF transmission.

However, Shen et al. show the control code being converted into the command and transmitted to the apparatus by an IR transmission independent of the internet (column 3, lines 22-26, "This selection will cause the emulator 216 to send instructions to the television 222 to display the selected TV program. The instructions are sent via an infrared signal outputted through the infrared port 218 of the PDA 210 to the infrared port 224 of the television 222); the touch screen GUI to display a graphical representation of the control panel of the dedicated remote of the specified apparatus (figure 3) including icons and soft keys (column 2, line 40 through column 3, line 16) in which keys and icons for selecting the commands for the selected apparatus are in the same locations as the corresponding keys and icons of the dedicated remote (column 2, lines 40-65) such that when a user switches between the remote control device and the dedicated remote, the control keys are in the same position as the corresponding keys and icons of the dedicated remote such that when a user switches between the remote control device and the dedicated remote, the control keys are in the same position and have the same function as the dedicated remote (figure 3); wherein the apparatus is not pre-configured to deliver or cause delivery of its respective control code to a control device (column 2, lines 52-67). Accordingly, it would have been obvious to one of ordinary skill in the art, at

the time the invention was made, to have modified the IR port of Zintel et al. to include the transmission from the remote control (PDA) to the apparatus by the IR signal to achieve the claimed invention. One would be motivated to make such a combination is to provide an energy efficient method of communication between two devices.

As to claim 16, while Zintel et al. teach code for controlling CE equipment and for being supplied in an XML format, Shen et al. teach the control code representing an IR or RF signal for transmission by a remote control device to the CE equipment (column 3, lines 22-26, "This selection will cause the emulator 216 to send instructions to the television 222 to display the selected TV program. The instructions are sent via an infrared signal outputted through the infrared port 218 of the PDA 210 to the infrared port 224 of the television 222); and rendering a control key layout that emulates a key layout of a dedicated control device for the CE equipment (column 2, line 40 through column 3, line 16). Accordingly, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the IR port of Zintel et al. to include the transmission from the remote control (PDA) to the apparatus by the IR signal to achieve the claimed invention. One would be motivated to make such a combination is to provide an energy efficient method of communication between two devices.

As to claim 18, Zintel et al. providing control codes in an XML mark-up language format to a home network comprising a control device for installing

on the control device (column 51, lines 55-62); an XSL style sheet (column 54, lines 24-32, "The XML 955 is a module that processes the XML device description and XSL style sheets for presentation in the application's user interface"); the universal remote user interface being as front panel display for controlling the specified apparatus,

Zintel et al. do not teach a first set of control codes with rendering instructions for rendering a graphical representation on a GUI touch screen; However, while Shen et al. teach the universal remote user interface being as front panel display for controlling the specified apparatus and a PDA screen including icons and soft keys (figure 3, column 3, lines 8-12, lines 60-65; column 1, lines 18-40), Shen et al. do not explicitly show the touch screen GUI of the universal remote. However, the touch screen GUI of the universal remote was a well known feature as demonstrated by Shen et al. because Shen teaches a method and system for using a personal digital assistant (PDA) as a remote control. PDA is defined by Wikipedia (Wikipedia.org) as A **personal digital assistant (PDA)**, also known as a **palmtop computer**, is a mobile device which functions as a Personal information manager and connects to the internet. The PDA has an electronic visual display enabling it to include a web browser, but some newer models also have audio capabilities, enabling them to be used as mobile phones or portable media players. Many PDAs can access the internet, intranets or extranets via Wi-Fi, or Wireless Wide Area Networks

(WWANs). Many PDAs employ touch screen technology (wherein Shen et al. teach downloading control code in XML language format into the remote control (PDA) (column 2, line 52 through column 3, line 15)).

Accordingly, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the front panel display of Zintel et al. to include the well-known feature of the touch screen GUI including icons and soft keys to achieve the claimed invention. One would be motivated to make such a combination is to provide the user an easy to use as the user simply touches what he/she sees on the display.

Zintel et al. do not show a second set of control codes representing commands suitable for transmission by the control device over an IR or RF network to a CE equipment to control the state of the CE equipment, the control codes being provided from a database over a bidirectional data network to the home network, wherein the equipment is not preconfigured to deliver or cause delivery of its respective control code to the control device.

Shen et al. show the control code being converted into the command and transmitted to the apparatus by an IR transmission independent of the internet (column 3, lines 22-26, "This selection will cause the emulator 216 to send instructions to the television 222 to display the selected TV program.

The instructions are sent via an infrared signal outputted through the infrared port 218 of the PDA 210 to the infrared port 224 of the television 222); wherein the apparatus is not pre-configured to deliver or cause delivery of its

respective control code to a control device (column 2, lines 52-67).

Accordingly, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the IR port of Zintel et al. to include the transmission from the remote control (PDA) to the apparatus by the IR signal to achieve the claimed invention. One would be motivated to make such a combination is to provide an energy efficient method of communication between two devices.

As to claims 20, Zintel et al. teach the language format being a markup language format (column 51, lines 55-62).

As to claims 21 and 26, Zintel et al. teach the bidirectional network including the internet and the source being located on the internet and remote from the apparatus and the network (column 11, lines 8-36).

As to claims 22 and 24, Zintel et al. disclose the bidirectional network including the internet, the plurality of home networks each being connected with the internet to receive control codes requested from the database over the internet (column 11, lines 8-36).

As to claim 25, Zintel et al. disclose the database being remote from and not a part of the home network and not a part of the CE equipment (column 11, lines 20-65).

As to claim 29, Shen et al. teach on a touch screen GUI display element, generating a graphical representation depicting the remote control for the specified apparatus (column 2, line 40 through column 3, line 16).

Accordingly, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the front panel display of Zintel et al. to include the well-known feature of the touch screen GUI including icons and soft keys to achieve the claimed invention. One would be motivated to make such a combination is to provide the user an easy to use as the user simply touches what he/she sees on the display.

As to claim 30, Shen et al. teach the rendering instructions render a graphical representation on a remote controller for the CE equipment which is to be controlled, the graphical representation being displayed on a touch screen such that the user can select among the control codes by touch screen (column 2, line 40 through column 3, line 16).

Accordingly, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the front panel display of Zintel et al. to include the well-known feature of the touch screen GUI including icons and soft keys to achieve the claimed invention. One would be motivated to make such a combination is to provide the user an easy to use as the user simply touches what he/she sees on the display.

As to claim 31, Zintel et al. teach the database being in communication over a bidirectional data network with a plurality home network systems each of which comprises at least a remote control device (column 6, lines 1-29), the control codes being deliverable to the remote control devices independent of the controlled apparatuses (column 8, lines 25-65), the control codes being

described in XML format with tags (column 51, line 65 through column 52, line 10) which define (1) control parameters including one or more of :carrier frequency, duty cycle, protocol type, repetition type, on/off times of the signal and bit pattern of command codes (column 51, line 65 through column 52, line 10) and (2) at least one of : a type of the controlled apparatus and a brand name of the controlled apparatus (column 3, lines 22-40).

Zintel et al. do not teach definition of a GUI display panel and soft key locations which when rendered on the GUI display panel display icons and buttons in the same position and with common functions as a dedicated remote for the controlled apparatus. However, while Shen et al. teach the universal remote user interface being as front panel display for controlling the specified apparatus and a PDA screen including icons and soft keys (figure 3, column 3, lines 8-12, lines 60-65; column 1, lines 18-40), Shen et al. do not explicitly show the touch screen GUI of the universal remote. However, the touch screen GUI of the universal remote was a well known feature as demonstrated by Shen et al. because Shen teaches a method and system for using a personal digital assistant (PDA) as a remote control. PDA is defined by Wikipedia (Wikipedia.org) as A **personal digital assistant (PDA)**, also known as a **palmtop computer**, is a mobile device which functions as a Personal information manager and connects to the internet. The PDA has an electronic visual display enabling it to include a web browser, but some newer models also have audio capabilities, enabling them to be used as

mobile phones or portable media players. Many PDAs can access the internet, intranets or extranets via Wi-Fi, or Wireless Wide Area Networks (WWANs). Many PDAs employ touch screen technology (wherein Shen et al. teach downloading control code in XML language format into the remote control (PDA) (column 2, line 52 through column 3, line 15)).

Accordingly, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the front panel display of Zintel et al. to include the well-known feature of the touch screen GUI including icons and soft keys to achieve the claimed invention. One would be motivated to make such a combination is to provide the user an easy to use as the user simply touches what he/she sees on the display.

Zintel et al. do not teach control codes for controlling apparatuses through remote control devices, the control codes representative of commands suitable for by the remote control devices to the apparatus over an IR or RF network. Shen et al. show the control code being converted into the command and transmitted to the apparatus by an IR transmission independent of the internet (column 3, lines 22-26, "This selection will cause the emulator 216 to send instructions to the television 222 to display the selected TV program. The instructions are sent via an infrared signal outputted through the infrared port 218 of the PDA 210 to the infrared port 224 of the television 222); wherein the apparatus is not pre-configured to deliver or cause delivery of its respective control code to a control device

(column 2, lines 52-67).

Accordingly, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the IR port of Zintel et al. to include the transmission from the remote control (PDA) to the apparatus by the IR signal to achieve the claimed invention. One would be motivated to make such a combination is to provide an energy efficient method of communication between two devices.

As to claim 32, Shen et al. teach rendering the icon or soft button in the same relative location as the control key of the remote for the specified apparatus which perform the same function (column 2, line 40 through column 3, line 16). Accordingly, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the front panel display of Zintel et al. to include the well-known feature of the touch screen GUI including icons and soft keys to achieve the claimed invention. One would be motivated to make such a combination is to provide the user an easy to use as the user simply touches what he/she sees on the display.

Response to Arguments

Applicant's arguments with respect to claims 4, 6, 14, 16-18, 20-22, 24-26 and 29-33 have been considered but are moot in view of the new grounds of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mylinh Tran. The examiner can normally be reached on Mon - Thu from 7:00AM to 3:00PM at 571-272-4141.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo, can be reached at 571-272-4847.

The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

571-273-8300

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